

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A channel frame for forward transmission of a data comprising:

a header subframe containing frame mapping information of data to be transmitted to a plurality of terminals; and

data subframes containing data multiplexed therein, and to be transmitted to the plurality of terminals at the present time in correspondence to frame mapping information transmitted in advance, wherein the frame mapping information transmitted in advance includes subframe numbers.

2. (Currently Amended) A channel frame as claimed in claim 1, wherein the frame mapping information transmitted in advance is transmitted 'n' frames before contained in other frame.

3. (Currently Amended) A channel frame as claimed in claim 2, wherein the frame mapping information transmitted in advance is transmitted 'n' frames before a current frame, and contains information on positions of the multiplexed data subframes in the current frame.

4. (Currently Amended) A channel frame as claimed in claim 3, wherein the frame mapping information transmitted in advance includes the subframe numbers transmitted 'n' frames before to current frame in succession, and the multiplexed data subframes are positioned in the current frame according to an order of transmission of the subframe numbers.

5. (Currently Amended) A channel frame as claimed in claim 1, wherein the header subframe contains data subframe numbers, frame quality indicator, and reserved/encoder tail information.

6. (Currently Amended) A channel frame as claimed in claim 1, wherein the data subframe contains data to be transmitted to a relevant terminal, frame quality indicators, and reserved/encoder tail information.

7. (Currently Amended) A channel frame as claimed in claim 1, wherein the header subframe is scrambled in a code all the terminals know.

8. (Currently Amended) A channel frame as claimed in claim 1, wherein the data subframes are encoded in codes only relevant terminals know.

9. (Currently Amended) A channel frame as claimed in claim 1, wherein the data subframes are multiplexed according to an order of generation.
10. (Currently Amended) A channel frame as claimed in claim 1, wherein the data subframes are multiplexed according to priorities of the terminals.
11. (Currently Amended) A channel frame as claimed in claim 1, wherein the data subframes are encoded, symbol repeated, interleaved, and scrambled.
12. (Currently Amended) A channel frame as claimed in claim 1, wherein, in case the data subframe can not complete one frame fully, a power supply for a section of the frame without data transmission is turned off.
13. (Currently Amended) A channel frame as claimed in claim 1, wherein at least one of the data subframes contains a broadcasting data to be transmitted to all terminals.
14. (Currently Amended) A channel frame as claimed in claim 13, wherein the frame mapping information of the data subframe that transmits the broadcasting data is transmitted 'n' frames before to a header subframe of a current frame.

15. (Currently Amended) A channel frame as claimed in claim 13, wherein the data subframe that transmits the broadcasting data is scrambled with codes known to all terminals that use the broadcasting service.

16. (Previously Presented) A method for forward transmission of a data, comprising:
(a) processing data to be transmitted at the present time to form subframes;
(b) multiplexing the formed subframes according to subframe mapping information transmitted in advance; and

(c) transmitting the multiplexed subframes, together with subframe mapping information of the subframes to be transmitted thereafter.

17. (Previously Presented) A method as claimed in claim 16, wherein processing data includes:

encoding, symbol repetition, interleaving, and scrambling for forming subframes.

18. (Previously Presented) A method as claimed in claim 16, further comprising:
a terminal being allocated with a subframe number of the terminal;
the terminal receiving subframe mapping information, and determining containment of the subframe number of the terminal; and

the terminal receiving a data for the terminal after 'n' frames at a position the subframe number indicates, if the subframe number of the terminal is contained as a result of the determination.

19. (Original) A method as claimed in claim 16, wherein the formed subframes are multiplexed according to an order of formation.

20. (Original) A method as claimed in claim 16, wherein the formed subframes are multiplexed according to priorities of the terminals.

21. (Original) A method as claimed in claim 16, wherein the frame mapping information is scrambled with codes all the terminals know.

22. (Original) A method as claimed in claim 16, wherein the subframes are scrambled with codes only a relevant terminal knows.

23. (Original) A method as claimed in claim 16, wherein the number of formed subframes is increased/decreased in proportion to a transmission rate of a data transmission channel.

24. (Currently Amended) A forward supplemental channel frame comprising:
a header subframe containing a plurality of subframe numbers relating to data for
a plurality of terminals; and
a plurality of data subframes each containing data to be transmitted to the plurality
of terminals, wherein the plurality of data subframes correspond to subframe numbers
transmitted in a previous frame.

25. (Currently Amended) The channel frame of claim 24, wherein the subframe
numbers contain information related to positions of the data subframes within a current frame.

26. (Currently Amended) The channel frame of claim 24, wherein the header
subframe contains data subframe numbers, frame quality indicator, and reserved/encoder tail
information.